

Claims:

1. A method of supporting a mobile communication session in a combined communications network comprising a mobile network and a non-mobile access network; in said mobile network, said mobile communication session is associated with a mobile number, the method comprises:

associating, in the non-mobile access network, said mobile number with a non-mobile device of said non-mobile network,

10 providing an access device being in communication with a plurality of non-mobile devices and with a controller of a mobile network, operative to represent said non-mobile device of said plurality of non-mobile devices as having said mobile number;

selectively conducting said mobile communication session either
15 through a mobile device associated with said mobile number in the mobile network, or through the non-mobile device associated with said mobile number in the non-mobile network.

2. The method according to Claim 1, further comprising providing
20 the access device with a capability to at least partially perform functions of a base station associated with the mobile network with respect to at least said mobile number of said mobile network, so that the access device is recognized by the controller of the mobile network as another base station.

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3. The method according to Claim 2, further comprising setting defaults at said access device, for routing of communication sessions.

4. The method according to any one of the preceding claims, further comprising providing the controller of the mobile network with a capability of giving preference to routing the mobile communication session to said non-mobile device via said access device.

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5. The method according to any one of the preceding claims, comprising storing the mobile number in the access device with indicating association of said mobile number with the non-mobile device of said non-mobile network.

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6. The method according to any one of Claims 2 to 5, wherein said mobile telephone number is a single number to both said mobile device and said non-mobile device.

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7. The method according to Claim 6, wherein said mobile device and said non-mobile device are one and the same device having a DECT-like functionality.

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8. The method according to any one of claims 2 to 5, wherein the mobile device has the mobile number and the non-mobile device has a non-mobile number assigned in the access device.

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9. The method according to any one of claims 6, 7, 8, comprising a step of transferring said communication session in progress from the non-mobile device to the mobile device, and vice versa.

10. A method of supporting a mobile communication session in a combined network comprising a mobile network and a non-mobile

network, comprising re-routing, during said communication session, from a mobile device associated with the mobile communications network to a non-mobile device associated with the non-mobile communications network, or vice versa.

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11.The method according to Claims 9 or 10, wherein the step of rerouting is preceded by obtaining a suggestion to reroute the communication session

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12. The method according to any one of Claims 9 to 11, comprising a step of determining proximity of the mobile device to the non-mobile device.

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13.The method according to Claim 11 or 12, wherein the suggestion of rerouting is applied from the device presently not engaged with the communication session.

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14.The method according to any one of Claims 11 to 13, wherein the step of obtaining the suggestion of rerouting is performed non-automatically and initiated by a user.

15.The method according to any one of claims 11 to 14, wherein the step of rerouting is preceded by obtaining approval for the rerouting.

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16.An access device of a non-mobile access network, for serving in a combined communications network comprising a non-mobile network and a mobile network,

wherein the access device being adapted to communicate with at least a plurality of non-mobile devices of the non-mobile network and a controller of a mobile network, and wherein the access device being operative to represent at least one non-mobile device of said plurality of non-mobile devices as having a mobile number of the mobile network;

wherein the access device is capable of performing, at least partially, functions of a base station of the mobile network for at least said mobile number of said mobile network, by providing an option to conduct a mobile communications session, associated in said mobile network with said mobile number, through said non-mobile device.

17.The access device according to Claim 16, wherein the mobile number belonging to said mobile network is stored in said access device as a number that is associated with a non-mobile device connected to said non-mobile network.

18.The access device according to claim 17, allowing said mobile communication session, being initially conducted through either said non-mobile device or a mobile device associated with said stored mobile number, to be continued by selectively using the other of said mobile device or said non-mobile device.

19.The access device according to any one of claims 16 to 18, being connectable with said non-mobile access network and with a controller of said mobile network to enable digital communication, being capable of converting communication protocols from at least one protocol used in said mobile network to at least one protocol used in said non-mobile network, and vice versa,

being provided with a functional unit performing functions similar to that of a base station of said mobile network, including:

enabling storing at the access device at least one said mobile number assigned to a mobile device, in association with at least one said non-mobile device,

monitoring and processing signaling sessions and communications sessions associated with said mobile telephone number.

20. The access device according to any one of Claims 16 to 19, capable of indirectly determining proximity, to said non-mobile device, of the mobile device associated with said stored mobile telephone number.

21. The access device according to Claim 19, capable of monitoring and processing signaling and communication sessions with respect to said non-mobile device having a non-mobile telephone number, thereby enabling versatile use of said mobile and non-mobile devices in the combined communications network, based on monitoring and processing of signaling and communication sessions in respect of both said non-mobile and said mobile telephone numbers.

22. The access device according to any one of claims 16 to 21, adapted to support rerouting of the mobile communication session, when in progress via the non-mobile device of the non-mobile network, to a corresponding mobile device of the mobile network and/or vice versa.

23. The access device according to any one of claims 16 to 22, comprising a DSLAM (Digital Signal Line Access Multiplexer),

comprising a hardware/software means supporting a node B functionality,
a memory means and a communications protocols converting block.

24. The access device according to any one of claims 16 to 22,
5 comprising an OLT (Optical Line Termination), comprising a
hardware/software means supporting a node B functionality, a memory
means and a communications protocols converting block.

25. A system operative to support a communication session in a
10 combined network, the system comprising

at least one access device according to any one of claims 16 to 24,

at least one non-mobile communications network connected to
said access device and comprising at least one non-mobile
communications device, and

15 at least one mobile communications network associated with at
least one mobile communication device and having a controller of the
mobile network connected to said access device and operative to
establish digital communication with said access device.

20 26. The system according to Claim 25, wherein said controller
of the mobile network is RNC (Radio Network Controller).